

### **ABSTRACT**

A motor control method and a motor control system are provided which control a motor using an acceleration command and an estimated inertia moment of a motor.

The motor control method for a parallel hybrid electric vehicle according to the

5 preferred embodiment of the present invention comprises calculating an estimated inertia moment of a motor, calculating a forward compensation current based on the estimated inertia moment and an acceleration command, calculating a final current command based on a speed controller output current and the forward compensation current, the speed controller output current being calculated based on the acceleration  
10 command, and controlling the motor using the final current command.